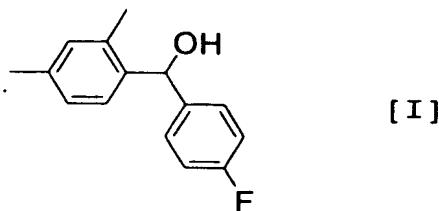


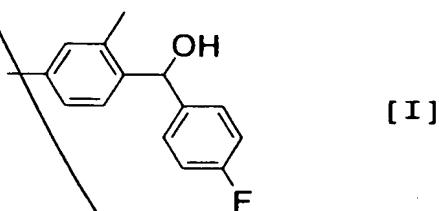
WHAT IS CLAIMED IS

1. A compound of the formula [I]



[I]

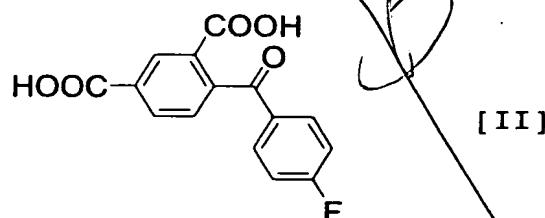
2. A production method of a compound of the formula [I]



[I]

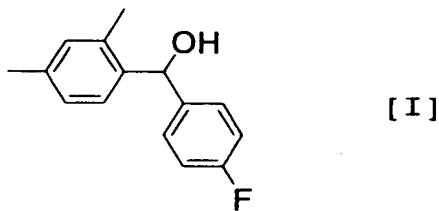
5 which comprises converting 4-bromofluorobenzene to 4-fluorophenylmagnesium bromide, and reacting the 4-fluorophenylmagnesium bromide with 2,4-dimethylbenzaldehyde.

10 3. A production method of a compound of the formula [II]



[II]

which comprises oxidizing a compound of the formula [I]

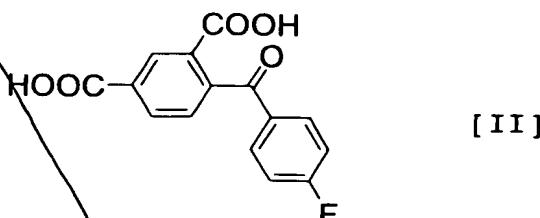


[I]

15 4. A production method of 1,3-dimethyl-4-(4'-fluorobenzoyl)benzene, which comprises subjecting *m*-xylene as a starting material and solvent to Friedel-Crafts reaction with 4-

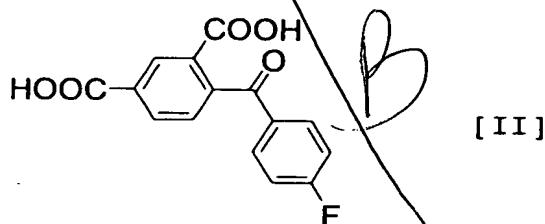
fluorobenzoyl halide.

5. A production method of a compound of the formula [II]



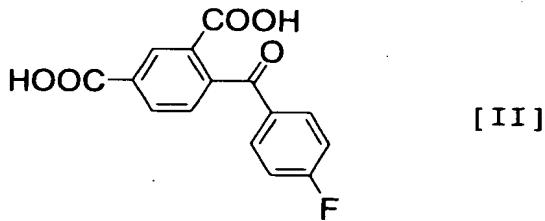
5 which comprises subjecting *m*-xylene as a starting material and solvent to Friedel-Crafts reaction with 4-fluorobenzoyl halide to give 1,3-dimethyl-4-(4'-fluorobenzoyl)benzene and oxidizing said 1,3-dimethyl-4-(4'-fluorobenzoyl)benzene.

10 6. A production method of a compound of the formula [II]



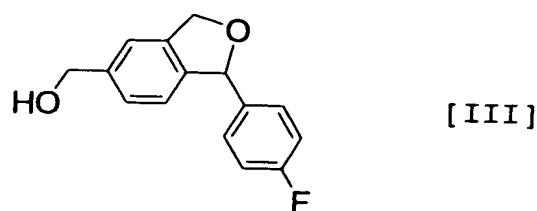
which comprises subjecting 2,4-dimethylbenzoyl halide to Friedel-Crafts reaction with fluorobenzene to give 1,3-dimethyl-4-(4'-fluorobenzoyl)benzene and oxidizing said 1,3-dimethyl-4-(4'-fluorobenzoyl)benzene.

7. A production method of a compound of the formula [II]



20 which comprises subjecting trimellitic anhydride to Friedel-Crafts reaction with fluorobenzene in a dichloro-substituted or trichloro-substituted benzene solvent.

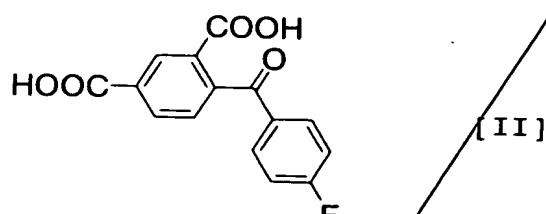
8. A production method of a compound of the formula [III]



[III]

which comprises subjecting a compound of the formula [II]

5

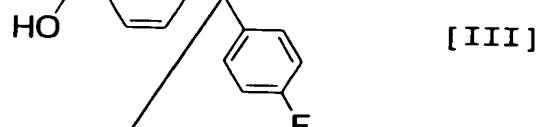


[II]

to reduction and cyclization.

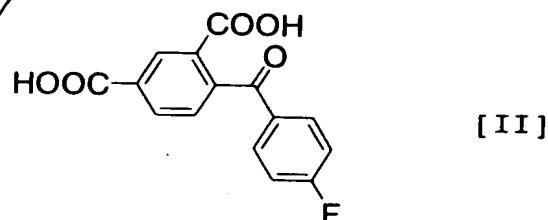
9. A production method of a compound of the formula [III]

10



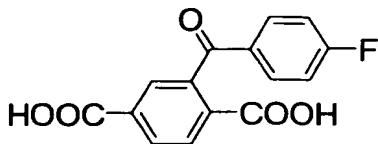
[III]

which comprises subjecting trimellitic anhydride to Friedel-Crafts reaction with fluorobenzene to give a mixture of a compound of the formula [II]



[II]

15 and a compound of the formula [IV]



[IV]

which is an isomer thereof, subjecting the mixture to reduction and cyclization, and isolating the resulting compound.

5 10. The production method of Claim 9, wherein the reaction solvent is dichloro-substituted or trichloro-substituted benzene.

10 11. The production method of Claim 9 or Claim 10, wherein the reduction is carried out using sodium borohydride.

15 12. The production method of Claim 9 or Claim 10, further comprising the use of a Lewis acid or dialkyl sulfate as a catalyst for the reduction.

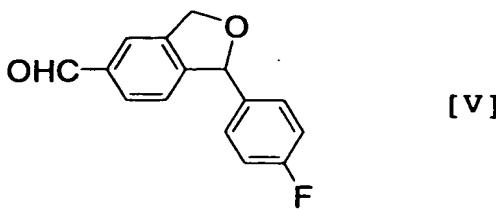
20 13. The production method of Claim 12, wherein the catalyst is sulfuric acid, dimethyl sulfate, diethyl sulfate or boron trifluoride.

25 14. The production method of Claim 9 or Claim 10, wherein the cyclization is carried out using an acid catalyst.

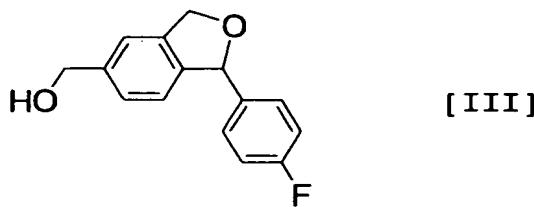
15. The production method of Claim 14, wherein the acid catalyst is an inorganic acid.

25 16. The production method of Claim 15, wherein the inorganic acid is hydrochloric acid, sulfuric acid or phosphoric acid.

17. A production method of a compound of the formula [V]



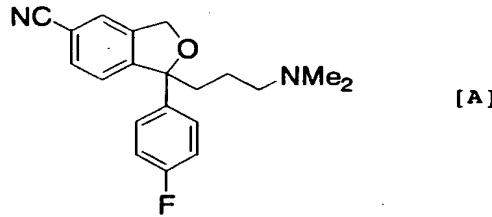
which comprises oxidizing a compound of the formula [III]



with manganese dioxide.

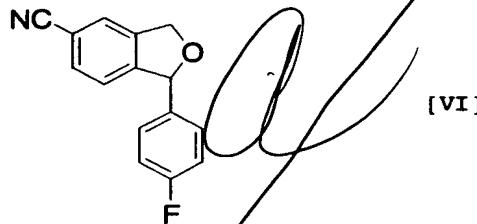
5

18. A production method of citalopram represented by the formula [A]



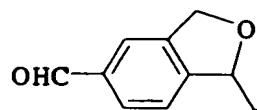
which comprises reacting a compound of the formula [VI]

10



with 3-(dimethylamino)propyl chloride in the presence of a condensing agent and at least one member selected from N,N,N',N'-tetramethylethylenediamine and 1,3-dimethyl-2-imidazolidinone.

15 19. The production method of Claim 18, wherein the compound of the formula [VI] is obtained by subjecting a compound of the formula [V]



[V]

successively to oximation and dehydration reaction.

5 20. The production method of Claim 18 or Claim 19, wherein the condensing agent is sodium hydride.

add
B1